

Application Ser. No. 10/062,700  
Amendment Dated August 17, 2007  
Reply to Office Action Dated February 20, 2007

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**Remarks**

Claims 1 to 26 remain in the application.

The present invention concerns methods and apparatus used to determine the physical connectivity configuration of the nodes in a communications network assuming that the physical connectivity configuration of at least a portion of the network is unknown. The claimed methods discover the connectivity of a network without knowledge of the topology (physical connectivity configuration) of the nodes (ATM switches, Frame Relay switches, Routers, etc.).

Claims 1-10, 13-22, and 25-26 stand rejected under 35 U.S.C. 102(e) as being anticipated by Crooks (U.S. Patent No. 6,859,542).

The rejection is based on the Examiner's statement that Crooks teaches a method to determine a physical connectivity configuration without using prior knowledge of port interconnections. There is no substantiation that Crooks does not use prior knowledge of the port interconnections in practicing the method.

The topology discovery process in Figure 4 and col. 4 line 40 to col. 5 line 10 of Crooks fails to teach or even suggest receiving status information without using prior knowledge of port interconnections relating to nodes in the portion of the network whose network unknown physical connectivity configuration is to be determined as claimed by Applicants in independent claims 1, 13, 25, and 26.

Crooks at col. 4 lines 31-33 reads "Other configuration information is available to completely define WAN components, the ATM switch 108, and the ATM switch 110." The clear implication is that the configuration information is available beforehand rather than being of unknown physical connectivity configuration which is to be determined as claimed by Applicants.

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Moreover, as noted in the Office Action, the TDU examines each of the ATM interfaces and retrieves and stores IP address, the subnet mask, the city, the state and VPI/VCI for each ATM interface, thereby creating a list of physical and logical information representing the ATM interface end points. The list in Table I includes port information which is presumably obtained a priori.

Therefore, it is respectfully submitted that Crooks fails to teach or even suggest the determining of physical connectivity without using prior knowledge of port interconnections as claimed by Applicants in independent claims 1, 13, 25, and 26 and hence, the claims 1, 13, 25 and 26 should be deemed allowable over Crooks.

Dependent claims 2-10 and 14-22 provide limitations on their respective independent claims and hence should likewise be deemed allowable over Crooks.

Claims 11, 12, 23, and 24 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Crooks in view of Ohta (U.S. Patent Application Publication No. 2002/0176370).

The same argument applies regarding the fact that Crooks fails to teach or suggest the determining of physical connectivity without using prior knowledge of port interconnections as claimed by Applicants in independent claims 11 and 23.

Ohta, in the portion cited by the Examiner at page 20 para. 0291-0292, describes tracking hop counts. In contrast, Applicants claim in claims 11 and 23 "receiving additional status information when the subset of nodes exceeds a threshold number of nodes". It is respectfully submitted that Crooks and Ohta fails to teach or even suggest receiving additional status information as claimed by Applicants in independent claims 11 and 23 and therefore, claims 11 and 23 should be deemed allowable over the art of record. Claims 12 and 24 are dependent claims dependent upon claims 11 and 23

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respectively and hence, claims 12 and 24 should be deemed allowable over the art of record.

Reexamination, reconsideration and allowance of Claims 1 to 26 are respectfully solicited.

The Patent and Trademark Office is hereby authorized to charge Deposit Account No. 02-1822 the fee due under 37 CFR 1.17(a) of \$1020.00 for a three (3) month extension of the time to reply to the Office Action.

Respectfully submitted,



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